

IN THE CLAIMS:

Please cancel claims 14-18 and 22-25 without prejudice or disclaimer as to the subject matter thereof.

1. (Currently amended) A method of performing magnetic resonance imaging (MRI) on a volume of tissue of a patient having an implantable medical device (IMD) with a telemetry unit communicating timing information as to operational conditions of the IMD, comprising:

receiving the timing information communicated from an implantable medical device (IMD);

applying a plurality of discrete MRI electromagnetic radiation bursts to the volume of tissue of the patient, wherein said applied radiation bursts are synchronized with operational conditions of the IMD based upon the received timing information-~~received~~;

imaging the volume of tissue upon a display, whereby the imaged tissue ~~being imaged is placed~~ is displayed in a substantially common state during each of said plurality of radiation bursts.

2. (Currently amended) ~~The~~A method according to~~of~~ claim 1, wherein the timing information includes sensed cardiac activity conditions measured by the IMD on a beat-by-beat basis, and wherein the volume of tissue comprises myocardial tissue.

3. (Currently amended) ~~The~~A method according to~~of~~ claim 2, further comprising sensing physiologic conditions of ~~at~~the patient with the IMD.

4. (Currently amended) ~~The~~A method according to~~of~~ claim 1, wherein the timing information defines a timing of cardiac pacing stimulation pulses applied to ~~at~~the patient by the IMD.

5. (Currently amended) ~~The A method according to~~ claim 24, further comprising:

stimulating a patient with the IMD based upon a plurality of different timing information, wherein the plurality of different timing information produces a plurality of different cardiac activity;

imaging the myocardial tissue ~~defines a~~ based on the timing of the plurality of different timing information during application of the stimulation applied to the patient by the IMD; and

at least one of storing and displaying at least some of said plurality of images when the myocardial tissue.

6. (Currently amended) The method of claim 5, ~~further comprising stimulating the patient with the IMD wherein at least one of said plurality of different timing information is intended to induce an arrhythmia during the MRI.~~

7. (Previously presented) The method of claim 1, wherein the IMD is a pacemaker and wherein the timing information defines a timing of a cardiac cycle.

8. (Previously presented) The method of claim 1, wherein performing the MRI includes applying one or more electromagnetic radiation bursts based on the timing information.

9. (Previously presented) The method of claim 1, wherein performing the MRI includes applying one or more gradient magnetic fields based on the timing information.

10. (Currently amended) A method of performing magnetic resonance imaging (MRI) on a patient having an implantable medical device (IMD) with a telemetry unit communicating timing information as to operational conditions of the IMD, comprising:

stimulating a patient with an implantable medical device (IMD) with a plurality of different timing information sets;

~~communicating-transmitting the operating~~ timing information indicative of a the plurality of different timing information sets of the stimulation from the IMD;

receiving at an MRI device the stimulation-operating timing information transmitted ~~communicated~~ from the IMD; and

applying ~~MRI~~ a plurality of electromagnetic radiation bursts from the MRI device to the patient synchronized with the timing information set ~~of the stimulation of the patient based upon the received timing information~~, whereby tissue being imaged is placed in a substantially common state during each common one of said plurality of electromagnetic bursts.

11. (Previously presented) The method of claim 10, further comprising:

sensing conditions of the patient with the IMD;

communicating sensed conditions timing information indicative of the sensed conditions; and

applying the MRI radiation bursts to the patient synchronized with the timing of one of the stimulation timing information and the sensed conditions timing information.

12.-18. (Canceled)

19. (Currently amended) A medical device comprising:

a magnetic resonance imaging (MRI) device configured for delivering a plurality of discretely-timed electromagnetic radiation bursts;

an implantable medical device (IMD) operational on a basis of ~~prescribed~~ a plurality of diverse timed conditions;

a control unit coupled to the MRI device to coordinate application of ~~magnetic resonance imaging (MRI)~~ the plurality of discretely-timed electromagnetic radiation bursts by the MRI device with the plurality of diverse timed conditions of operation of the (IMD); and

a transmitter coupled to the control unit to transmit timing information to the IMD to cause the IMD to operate in accordance with the timing information and establish a ~~prescribed~~ a plurality of timed conditions that ~~are~~ is synchronized with the application of plurality of discretely-timed electromagnetic radiation bursts ~~of~~ by the ~~an~~ MRI device.

20. (Original) The medical device of claim 19, wherein the medical device comprises a programmer for the IMD.

21.-25. (Cancelled)

26. (Currently amended) An apparatus comprising:

means for receiving a plurality of different timing information from an cardiac-based implantable medical device (IMD) related to timed operating conditions of the IMD;

means for performing magnetic resonance imaging (MRI) of a volume of myocardial tissue by applying electromagnetic radiation bursts based upon the plurality of different timing information; and

means for synchronizing application of electromagnetic radiation bursts with the plurality of different timing information ~~timed operating conditions of the IMD~~,

whereby the volume of myocardial tissue being imaged is placed in a substantially common state during each radiation burst that is based upon a common one timing information of said plurality of different timing information.